

# Professional practice assessment in ambulatory private rheumatology: a pilot evaluation of the medical file content for rheumatoid arthritis

J. Fechtenbaum<sup>1,2</sup>, L. Gossec<sup>1</sup>, H. Nataf<sup>3</sup>, P. Boumier<sup>4</sup>, P. Breuillard<sup>5</sup>, V. Gaud Listrat<sup>1,6</sup>, B. Giraud<sup>1-7</sup>, C. Hudry<sup>1,8</sup>, F. Lecoq D'Andre<sup>1,9</sup>, M.-A. Izou Fouillot<sup>10</sup>, E. Maheu<sup>11</sup>, M. Nguyen<sup>1,12</sup>, J. Simonnet<sup>13</sup>, M. Dougados<sup>1</sup>, for the medical network RHEVER

<sup>1</sup>Paris Descartes University, Medicine Faculty, UPRES-EA 4058, APHP, Rheumatology B Department, Cochin Hospital, Paris; <sup>2</sup>93500 Pantin; <sup>3</sup>78200 Mantes La Jolie; <sup>4</sup>80000 Amiens; <sup>5</sup>95500 Gonesse; <sup>6</sup>91240 Saint Michel sur Orge; <sup>7</sup>91190 Gif sur Yvette; <sup>8</sup>75008 Paris; <sup>9</sup>75017 Paris; <sup>10</sup>94160 Saint Mandé; <sup>11</sup>75011 Paris; <sup>12</sup>75008 Paris; <sup>13</sup>75116 Paris, France.

Jacques Fechtenbaum, MD; Laure Gossec, MD; Henri Nataf, MD; Patrick Boumier, MD; Philippe Breuillard, MD; Véronique Gaud Listrat, MD; Bernard Giraud, MD; Christophe Hudry, MD; France Lecoq D'Andre, MD; Marie-Ange Izou Fouillot, MD; Emmanuel Maheu, MD; Minh Nguyen, MD; Jean Simonnet, MD; Maxime Dougados, MD.

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Please address correspondence to: Dr. Laure Gossec, Service de Rhumatologie B4, Hôpital Cochin, 27 rue du Faubourg St. Jacques, 75014 Paris, France. E-mail: laure.gossec@cch.aphp.fr

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## ABSTRACT

**Objectives.** Professional Practice Assessment (PPA) has become an obligation for all physicians in France, however its modalities remain unclear. The objective of this work was to evaluate the feasibility and accuracy of a PPA for private practice rheumatologists performed in the context of a network.

**Methods.** A list of items considered mandatory to collect during an outpatient visit for rheumatoid arthritis, was prepared by the network. Non hospital-based rheumatologists, members of the network then evaluated some of their patient files selected by chronological order over a one-month period of time using this list. These files were then assessed by another private rheumatologist, member of the group, randomly allocated, using the same list of items.

**Results.** Eighty percent of the private-practice doctors accepted to participate. The mean time to evaluate 15 patient files was 2 hours. Agreement between auto-evaluation and external evaluation for each file was good (agreement statistic, 0.75-1.0). Items mandatory to collect were collected in a high proportion of cases (84.6%).

**Conclusion.** PPA can be performed in the context of a network, auto-evaluation is a valid method and when the list of items is decided on by the network, the data are collected satisfactorily.

## Introduction

Professional Practice Assessment (PPA) has become an obligation for all physicians in France, both in hospital-based and private practice (1). Practical application of this assessment is the responsibility of the French High Authority of Health, and is to date much debated: what must be evaluated? Who must define the evaluation criteria? Who must evaluate? These discussions often occur within networks of care. The Hospital and City Rheumatology network (RHEVER) was initiated in 1999 in Paris, France. It includes private practice and teaching-hospital rheumatologists. Its objective is to improve the quality of patient care by better standardising practices among its members. It appeared necessary to us to evaluate through our network, the

validity and the quality of the contents of our medical files.

The first step of this evaluation was carried out in the hospital context and has been reported elsewhere (2). We then decided to extend this experiment to the network of private rheumatologists. This new study was carried out a few months after the first one, using the same methodology, in files of rheumatoid arthritis (RA) patients.

The objectives of this pilot PPA applied to private rheumatology practice within our network were to evaluate the feasibility of a PPA made by rheumatologists themselves, on a list of items decided by the rheumatologists in a network, and to compare the results obtained if the physician evaluated his own files (auto evaluation) versus if the evaluation was performed by another physician (external evaluation).

## Methods

The network is composed of 29 rheumatologists. Members with a private practice could volunteer for this PPA exercise.

### Determination of the data to be collected at the time of the visit

We decided to define ourselves the minimal required data to be recorded in the files. This step was performed during several meetings of our network during years 2000-2005. The choice of the data to be collected was made collectively, based on analysis of the literature and by taking into account the opinion of the network-members (*i.e.*, both a data-driven and an expert-driven approach were used). The initial goal was to develop only one list of minimal items to collect for all members of the network (2). The work presented here concerns the list of items developed for patients presenting with RA.

### Experimental design

This evaluation is a cross-sectional study of medical files, coordinated by one of us (JF) in June 2006. Each physician selected the last 5 consecutive medical files of RA patients coming for their follow-up visit, in a chronological order starting from March 31, 2006. Data were anonymised and reproduced,

and files were searched for the relevant items. We also asked each physician how much time they estimated the entire process had taken.

#### *Auto-evaluation versus external evaluation*

We carried out a double evaluation: the files were evaluated by their respective authors (auto-evaluation), then by another rheumatologist selected at random within the network (external evaluation), with the same grids for data collection and blind to the other results.

#### *Statistical analysis*

The comparison of auto and external evaluations was carried out by inter-observer agreement statistics on paired data by the Cohen's Kappa score (3). However, in certain cases, when kappa statistics were not interpretable (4), another agreement statistic, S of Bennett (5) was used in a comparable way.

### **Results**

#### *The network RHEVER and participants in the PPA*

Of the 29 rheumatologists members of the network at the time of this study, 15 had a private practice. Among them, 12 (80%) took part, voluntarily, in this study. The study began on June 13, 2006 and all the data were obtained before October 14, 2006, which was considered acceptable. There were no "missing data". The average time spent for auto-evaluation including the selection of 15 files (5 RA and 10 various diagnoses) was 1 hour 53 minutes (range: 15 minutes-3 hours 30).

#### *Data to collect during a rheumatologic visit*

The list of the minimal required data to be recorded during a visit was finalized in 2005 and has been described elsewhere (2). These data (assessed according to presence or absence) are presented in Table I. Some items are patient-reported (and noted in the file by the doctor), such as morning stiffness and nocturnal awakenings. It was deemed necessary to note at least one result for symptoms assessed by visual analog scale, VAS (last item Table I), that is, to note a patient-assessed VAS

either for pain, or for disease activity. In fact, in many cases both VAS were assessed but we estimated only one of the 2 was mandatory. Other items reflect clinical examination, as well as current treatment (Table I).

#### *Adequacy of the data noted in the files with the data considered mandatory*

The total results of adequacy, *i.e.*, the frequency with which the data were noted in the patient's file, compared to the pre-established grids of those necessary to collect during a visit, according to the self- or external evaluation, are presented for each item in Table I. Overall, adequacies were high, slightly higher in auto-evaluation. All the items considered mandatory were reported in the files in more than 70% of the cases.

#### *Agreement between self- and external assessments*

Agreement between self- and external assessments was very good with an S statistic for inter-observer agreement of 0.76 (Table I). Overall, the agreement was good for all the items; the least coherent item was the presence or not of the physician's name (S=0.23). If we do not take into account this item, inter-observer agreement was 0.83 overall.

### **Discussion**

This study proves the feasibility of a process of PPA within the framework of a network of rheumatologists, when the process has been developed by the whole group. It also shows that auto-evaluation is a satisfactory technique to carry out a PPA. Lastly, when physicians agreed beforehand on the items mandatory to collect during a visit, it can be noted that they indeed collect these items satisfactorily in clinical practice.

PPA in private practice is an innovation for many private rheumatologists. The files held within our private practice offices are usually not meant to be read, even less to be audited. It was important also to show that an evaluation made by the physician himself could provide results very similar to those obtained by an external assessment. Discrepancies appeared especially concerning the name of the physician. This item was maintained by homogeneity with the hospital-based study (2) and to sensitise the physician regarding future shared medical files which are scheduled in France. This leads to a discussion on the one hand of the relevance of some items and, on the other hand, of the potential advantages of computerized files. Even if our list of items

**Table I.** Rate of agreement, calculated by inter-observer statistics (kappa or S of Bennett)\*, of the evaluation of the data collected at the time of a follow-up visit of a patient with rheumatoid arthritis, in private rheumatologic practice, according to whether this evaluation was made by the rheumatologist himself on his own file (auto evaluation), or by another rheumatologist (hetero evaluation), and rate of adequacy in the files: percentage of presence of the items considered as essential, according to the mode of evaluation, auto-evaluation or by another physician of the network (hetero-evaluation).

Item evaluated in the file	Agreement statistics	Adequacy in auto evaluation (%)	Adequacy in hetero-evaluation (%)
RA: global	0.76	85.5	84.6
Name of the physician	0.24	81.8	76.4
Date of visit	1.00	100	100
current treatment	0.75	94.5	89.1
DMARDS noted	0.82	92.7	94.5
Symptomatic treatment	0.84	85.5	90.9
<i>Clinical features</i>			
Nocturnal awakenings	0.85	70.9	74.5
Morning stiffness duration	0.82	72.7	78.2
painful joint index	0.75	83.6	78.2
synovitis index	0.83	89.1	85.5
Visual analog scale scores	0.82	83.6	78.2

DMARDS: disease modifying antirheumatic drugs.

\*Agreement is good from 0.60 to 0.80, excellent > 0.80

is imperfect, we believe that the elaboration of such a list is a fundamental work because it personally implies each member of the network. This process is a PPA coupled to a continuous education. It remains to be shown that the effect of this kind of PPA is persistent. Another limitation of our study lies in the recruitment of physicians for this exercise, biased by their commitment in a care network, therefore more likely to participate in a PPA exercise.

An essential aspect relates to the consequences with respect to the quality of care. Indeed, it is one of the limitations of currently performed PPA exercises. Our study did not evaluate the competence of the physicians, wide and complex field as described by Epstein (6). Bamsley (7) considers that one of the reasons explaining the difficulties of a self-assessment by physicians is the confusion made between "confidence" (or insurance) and competence. This author shows that this occurs when the belief of the good attitude to be observed is large and especially when the physician thinks that he really observes it. However when this physician receives an external evaluation of his activity, he becomes more conscious of reality. Another author (8) considers that the physician improves his capacities by examining his errors. For Jamtvedt (9) audit and information feedback are the best strategies to improve professional practice. This author stresses that it seems logical to think that health professionals can modify and correct their practice if one allows them to note that their practice is contradictory.

If the principle of PPA exercise seems admissible, the methods of application are still debated. There is no consensus regarding the support and the type of audit (self- or external evaluation). The majority of authors (10) think that a self-assessment based on criteria worked out by one single physician is not a good method. They show that professional competence requires confrontation with other colleagues. It is difficult for a professional to identify his weaknesses and his needs for upgrading (11). It is the principle and one of the justifications of a care network. The program

of medical knowledge self-assessment of the American College of Physicians (12) was thus worked out by the mean of Internet. Davies (13) thinks however that it stimulates more personal training than confrontation. He also underlines in a meta analysis of various professional training schemes, the difficulty to assess their impact on the medical activity. One of the conclusions (14) is that a formal program (reading, exhaustive course and audiovisual presentations) has little impact on the improvement of the performances of the physician; in contrast to interactive programs involving physicians and confrontation of practices.

In this PPA, the list of items to collect during a visit was determined by the members of the network, through group discussions after a literature review. We believe this technique enhances knowledge and leads to higher quality in patient files because the rheumatologists are involved in the choice of the items. However, it can be discussed that the list of items chosen here is not optimal. Thus, although nocturnal awakenings are not part of the core set for RA, the RHEVER group decided to collect this element systematically, because it reflects inflammation (as does morning stiffness), and it contributes to altering quality of life through sleep disturbance and enhanced fatigue. Furthermore, other elements which could be of interest are lacking, in particular a functional score such as the HAQ to reflect functional impairment; however the HAQ is not currently systematically assessed in private practice rheumatology in France; other elements such as a patient self joint counts or composite criteria such as the Disease Activity Score could also be discussed. The next steps in our network include revising and enhancing the list of items to collect, as well as similar experiences for different diseases.

This project of PPA of private rheumatologists coordinated by a network was a pilot experiment which we consider successful: assessing professional practice is possible within a network; it is well accepted and appreciated by rheumatologists. Further work is needed in this field.

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